9.8 days) and PVT (7.7 ± 8.4days), compared with AMI patients without ventricular arrhythmia (5.5 ± 6.1 days). Average hospitalization costs were significantly higher ($p < 0.001$) in AMI patients with sustained VT/VF ($26,524 ± 29,869) and PVT ($23,447 ± 27,704) than those for AMI patients without ventricular arrhythmia ($14,449 ± 16,638). **CONCLUSIONS:** Ventricular arrhythmia in AMI patients was associated with higher mortality and increased resource utilization. Prevention of ventricular arrhythmia in AMI patients would potentially yield benefits of increased survival and reduced costs.

**CV3**

### SWITCHING, AUGMENTATION AND TITRATION OF LIPID LOWERING AGENTS OF MEDICARE/MEDICAID DUAL ELIGIBLE PATIENTS BY ETHNICITY

Mucha L[1], Mark T[2], Axelsen K[3]
[1]Thomson Medstat, Cambridge, MA, USA, [2]Thomson, Washington, DC, USA, [3]Pfizer Global Pharmaceuticals, New York, NY, USA

**OBJECTIVES:** The objective of this study was to examine prescribing patterns of lipid lowering agents among Medicaid/Medicare dual eligible patients by ethnicity. **METHODS:** Data came from the Thomson Medstat Marketscan® Medicare and Medicaid claims databases. Beneficiaries who were prescribed these agents during 2003 and enrolled for the full year in both databases were in the study sample. Logistic regression models estimated the probability of a switch, augmentation, or titration up, by ethnicity. Switching was a change in the agent, augmentation was at least 30 days of overlapping therapy, and titration upwards was an increase in dosage for two consecutive prescriptions. **RESULTS:** There were 239,530 patients included in the study. Fewer African Americans (9%) switched lipid lowering agents than Asians, Hispanics, Caucasians or other ethnicities (14%, 13%, 12%, and 13%, respectively) did. Fewer African Americans (3%) augmented with another agent than Asians, Hispanics, Caucasians or others (6%, 5%, 6% and 5%). Logistic regressions showed that African Americans were significantly less likely to switch (OR 0.68; 95% CI 0.60–0.78), augment (OR 0.53; 95% CI 0.43–0.66), or titrate up (OR 0.75; 95% CI 0.67–0.84) than Caucasians, controlling for age, gender, state of residence, days on therapy, number of outpatient visits, and the Chronic Disease Score. **CONCLUSIONS:** Results were consistent with the literature which shows lipid lowering agent prescribing for African Americans tended to be less aggressive, as evidenced by fewer switches, less augmentation and less upward titration. This may reflect treatment differentials such as clinicians being less likely to increase doses of lipid lowering agents to help these patients reach goal. It may also reflect the effectiveness of these agents in lowering lipid levels and keeping patients at consistently low levels. These treatment issues merit further observation as dual eligibles move into Medicare part D plans with differing coverage and formulary restrictions.

**CV4**

### MANAGING CONGESTIVE HEART FAILURE: COHORT ANALYSIS OF USE AND COST OF HOSPITAL, EMERGENCY DEPARTMENT AND OBSERVATION UNIT CARE OVER TWELVE MONTHS

O'Brien JA, Duran PA, Pitoniak-Morse C, Caro JJ
Caro Research Institute, Concord, MA, USA

**OBJECTIVES:** Examine use and cost of inpatient, emergency department (ED), and observation unit (OU) services during one year by patients treated for congestive heart failure (CHF). **METHODS:** Using 2001–2002 Massachusetts hospital, ED and OU data, a cohort of adult patients (age: 18+ years) with CHF (ICD-9 principal diagnosis code: 428.0–428.9) was identified. A patient CHF encounter profile was established starting with the first stay/visit (index encounter) at any hospital, ED or OU in 2001 and included all subsequent inpatient, ED or OU care for CHF within 12 months. Charges (accommodations, ancillary services) adjusted by a 0.55 cost-to-charge ratio, medical inflation and geographic factors are reported as 2005 US$ costs. **RESULTS:** The patient cohort (n: 18,550; females: 56%; mean age: 61 years, range: 18–104) used a combined total of 28,673 CHF-related hospitalizations, ED and OU stays during one year (mean encounters: 1.5, range: 1–29). Of all encounters, 84% were inpatient, 12% ED and 4% OU. Only inpatient care was used by 79% of the cohort (mean stays: 1.4, range: 1–16); 8% ED only (mean visits: 1.1, range: 1–19); 3% OU only (mean stays: 1.1, range: 1–3); 9% used multiple care settings (mean encounters: 3, range: 2–12); and 1% used all (mean encounters: 5.2, range: 3–29). Patients with inpatient plus ED or OU care had a significantly ($p < 0.01$) greater readmission rate (44%) for CHF than those utilizing only inpatient care (26%). On average, hospital length of stay was 5.4 days, cost: $7736; ED visit: 4.7 hours, cost: $740; OU stay: 29 hours, cost: $2468, per encounter. Cumulative cost for hospital, ED and OU care for one year was roughly $190 million. **CONCLUSIONS:** Inpatient care was the dominant non-routine setting for acute management of CHF. Those utilizing multiple acute care locations are more likely to have multiple hospitalizations within one year.

## INFECTIOUS DISEASE

**ID1**

### "GATEKEEPERS AND SENTINELS": IMPLICATIONS FOR DRUG UTILIZATION POLICY IN THE COMMUNITY SETTING

Kahan NR[1], Waitman DA[1], Kahan E[2], Chinitz DP[3]
[1]Leumit Health Fund, Tel-Aviv, Israel, [2]Tel-Aviv University, Kfar Saba, Israel, [3]The Hebrew University of Jerusalem School of Public Health, Jerusalem, Israel

**OBJECTIVES:** Prior authorization (PA), the requirement of physicians to obtain pre-approval as a prerequisite for coverage may decrease drug utilization via a "sentinel effect", a decrease in utilization caused by external review of prescribing. The purpose of this study was to assess the affect a PA restriction had on the utilization patterns of cefuroxime tablets in a Managed Care Organization (MCO) in Israel. **METHODS:** Prescribing patterns were evaluated from electronic patient records. A retrospective drug-utilization analysis was conducted. All prescriptions for solid state antibiotics for patients diagnosed with an infectious disease during three parallel, three month segments: before, during, and after a PA restriction for cefuroxime was enforced were included. Frequency and proportion of antibiotic prescriptions for cefuroxime, distribution of infectious diseases treated with cefuroxime, and the request rejection rate when PA was required were calculated. **RESULTS:** Prescription of cefuroxime declined from 5538 (8.0% of eligible antibiotic prescriptions, 95% CI = 7.8, 8.2) in the initial period to 1036 (1.2%, 95% CI = 1.1, 1.3) during the PA period, rising to 3961 (4.3%, 95% CI = 4.2, 4.4) in the post-PA period. Changes in the distribution of diseases treated with cefuroxime during the PA stage tended to regress after revocation to those observed in the pre-PA period. The rejection rate was 8.5% (95% CI = 6.9–10.1). **CONCLUSIONS:** Although a PA requirement for cefuroxime markedly reduces utilization probably due to a "sentinel effect", it will not lead to residual effects on prescribing behavior upon its revocation, indicating the need for a multipronged approach in the realm of policy, regulation and management regarding prescribing behavior. While many articles have alluded to the need to create a "culture of quality", we